



Resonance 1.0 for Nuke

User's Guide

copyright © 2014 artixels

Resonance for Nuke User's Guide ("This Document")
Copyright © 2014 Artixels. All Rights Reserved.

Use of this document and the Resonance software is subject to an End User License Agreement (the "EULA"), the terms of which are incorporated herein by reference. This document and the Resonance software may be used only in accordance with the terms of the EULA. This document, the Resonance software and all intellectual property rights relating thereto are and shall remain the sole property of Artixels.

Artixels assumes no responsibility or liability for any errors or inaccuracies that may appear in this document and its content is subject to change without notice. The content of this document is furnished for informational use only. No part of this document may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, recording or otherwise, without the prior written permission of Artixels.

The names of other actual companies and products mentioned in this document (including, but not limited to, those set forth below) may be the trademarks or service marks, or registered trademarks or service marks, of their respective owners. No association with any company or product is intended or inferred by the mention of its name in this document.

Nuke™ compositing software © 2013 The Foundry Visionmongers Ltd. All Rights Reserved.

Nuke™ is a trademark of The Foundry Visionmongers Ltd.

Linux ® is a registered trademark of Linus Torvalds.

Windows ® is the registered trademark of Microsoft Corporation.

Mac, Mac OS, Leopard and Snow Leopard are trademarks of Apple, Inc., registered in the U.S. and other countries.

Maya ® is a registered trademark of Autodesk, Inc., in the USA and other countries.

Contents

1 Install Resonance for Nuke on Windows

1.1	Windows System requirements	4
1.2	Resonance package content (Windows)	4
1.3	Interactive installation (Windows)	5
1.4	Silent installation (Windows)	6
1.5	Using Node-locked License (Windows)	7

2 Install Resonance for Nuke on Mac OSX

2.1	Mac OSX System requirements	9
2.2	Resonance package content (Mac OSX)	9
2.3	Interactive installation (Mac OSX)	10
2.4	Silent installation (Mac OSX)	11
2.5	Using Node-locked License (Mac OSX)	12

3 Resonance Overview

3.1	What is Resonance ?	13
3.2	Control Panel	15

4 Quick start and look presets

4.1	Resonance HUD	17
4.2	Look Presets	18

5 Resonance parameters reference

Resonance for Nuke License Agreement

1 Install Resonance for Nuke on Windows

1.1 Windows system requirements

Supported Hardware:

- Intel Pentium 4 processors or above (SSE2 instructions required)

Supported Operation System:

- Windows 7 64-bit

1.2 Resonance package content (Windows)

Resonance for Nuke on Windows is distributed in a zipped archive:

[Resonance_1.0_Nuke70_Win64.zip](#) (for Nuke 7.0)
OR [Resonance_1.0_Nuke80_Win64.zip](#) (for Nuke 8.0)

Please extract the package to a location you choose and you should find the following files:

[Resonance_1.0_Nuke70_win64.exe](#) (The installer)
OR [Resonance_1.0_Nuke80_win64.exe](#) (The installer)
[lmxconfigtool.exe](#) (licensing hostid utility)
[README_FIRST.pdf](#) (READ ME first !)
[Resonance_1.0_UserGuide.pdf](#) (Resonance User Guide, this document)

The installer supports both interactive and silent installation modes. Interactive installation mode allows users to choose various installation options interactively and silent installation mode enables administrator to install Resonance with a single command.

1.3 Interactive installation (Windows)

1. Make sure you have the necessary administrative right for installation.

2. Launch the Installer and review EULA. Double-click on the executable [Resonance_1.0_Nuke70_win64.exe](#) or [Resonance_1.0_Nuke80_win64.exe](#) to start the installation, you should see the installer showing Resonance's End User License Agreement (EULA) and please review it carefully.

3. Choose Installation folder. If you agree with the EULA and proceed, you will be prompted for the destination of installation. By default, it installs Resonance into Nuke's central plug-in location ([C:\Program Files\Common Files\Nuke\7.0\plugins](#)) for Nuke 7.0 on Windows OR ([C:\Program Files\Common Files\Nuke\8.0\plugins](#)) for Nuke 8.0, or you may choose your own custom location as shown in fig. 1a.

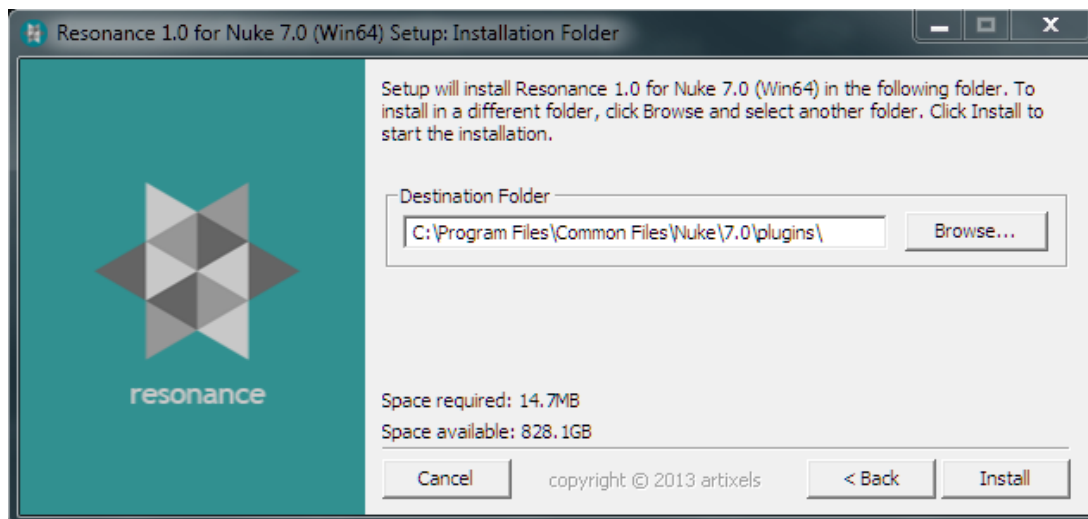


fig. 1a - Resonance Installer for Windows

4. NUKE_PATH environment variable. Once the installer has finished installing the plug-ins, it will offer to modify the NUKE_PATH environment variable for you if non-default installation location is chosen. *If you chose not to modify NUKE_PATH by the installer, then you MUST manually modify your NUKE_PATH environment variable to include Resonance's directory as shown below, if not, Nuke will not be able to find Resonance plugins. For example, if you have installed Resonance into [C:\myPlugins](#), then NUKE_PATH must include:*

[C:\myPlugins\artixels\resonance1.0](#)

5. Installation Complete. Resonance plug-ins are now installed and you may want to read the Licensing section to learn how to install your Resonance license key.

1.4 Silent installation (Windows)

1. Make sure you have the necessary administrative right for installation.

2. Command line Installation. In order to use silent installation, you have to invoke the installer [Resonance_1.0_Nuke70_win64.exe](#) OR [Resonance_1.0_Nuke80_win64.exe](#) from a Windows Command Prompt window with the /S option and additional /D option to define the destination directory. For example, the following command installs Resonance into Nuke's default plug-in path:

```
C:\> Resonance_1.0_Nuke70_win64.exe /S
```

The following command installs Resonance into [C:\myPlugins](#) and *NUKE_PATH* environment variable will be modified automatically to include this path too.

```
C:\> Resonance_1.0_Nuke70_win64.exe /S /D=C:\myPlugins
```

3. Installation Complete. Resonance plug-ins are now installed and you may want to read the Licensing section for license installation.

1.5 Using Node-locked License (Windows)

This section describes how to install Resonance node-locked license.

1. Make sure you have the necessary administrative right for license installation.

2. Obtain the Host ID. In order to generate an Resonance node-locked License key, we need information about your host Windows workstation. Please run the utility named [lmxconfigtool.exe](#) which is included in the installation package as shown in fig. 1b. On the first tab of the configuration tool, please use the 'Save To File' button to save the host information into a [hostid.txt](#) file.

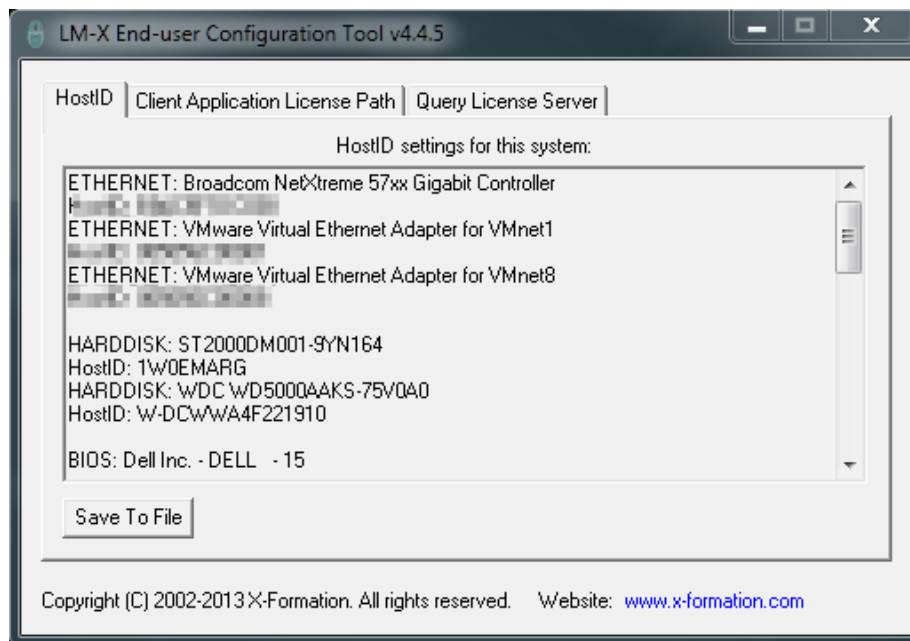


fig. 1b - LM-X End-user configuration tool (Windows)

3. Obtain the license file from us. Please email the [hostid.txt](#) file to: rsn@artixels.com and you may expect to receive a zipped license file ([rsn_< client_name >.zip](#)) from us within 2 working days. When you have received the zipped license file, please unzip it and you will find the license key file named [rsn_v1.lic](#).

4. Install the license key file. Copy the license file ([rsn_v1.lic](#)) and put it into the appropriate path as shown in Table 1A.

Installation location	License Key Location
Nuke 7.0 default	C:\Program Files\Common Files\Nuke\7.0\plugins\artixels\resonance1.0
Nuke 8.0 default	C:\Program Files\Common Files\Nuke\8.0\plugins\artixels\resonance1.0
Others	\${CUSTOM_PATH}\artixels\resonance1.0

Table 1A - Node-locked license key location (Windows)

5. Alternate License Location (Optional). In case you would like to keep your license file ([rsn_v1.lic](#)) in a custom location instead of those listed in Table 1A, you may use a Windows environment variable [ARTIXELS_LICENSE_PATH](#) to instruct Resonance to locate the license as follows:

[ARTIXELS_LICENSE_PATH=C:\YOUR_PATH\rsn_v1.lic](#)

6. Resonance is ready now. Have fun !

2 Install Resonance for Nuke on Mac OSX

2.1 Mac OSX system requirements

Supported Hardware:

- Intel Core processors or above (SSE2 instructions required)

Supported Operation System:

- Mac OSX 10.6 (Snow Leopard), 10.7 (Tiger) and 10.8 (Mountain Lion) only.

2.2 Resonance installer disk image (Mac OSX)

Resonance for Nuke on Mac OSX is distributed in a compressed disk image file -



fig. 2a - Resonance Installer disk image

Please mount the disk image and you should find the following files (as shown figure F) :

Resonance 1.0 Nuke 7.0 (The Installer)
OR Resonance 1.0 Nuke 8.0 (The Installer)
lmxendutil (licensing hostid utility)
README_FIRST.pdf (Read it first !)
Resonance1.0_UserGuide.pdf (Resonance User Guide, this document)
artixels folder (Drag-and-drop installation)

2.3 Interactive installation (Mac OSX)

The installer supports interactive installation, it allows users to choose various installation options interactively or you may also drag-and-drop the artixel's folder for Mac style installation mode.

1. **Make sure you have the necessary administrative right for installation.**
2. **Launch the installer and review EULA.** Double-click on the installer [Resonance 1.0 for Nuke 7.0](#) or [Resonance 1.0 for Nuke 8.0](#) to start installation, you should see the installer showing our Resonance End User License Agreement (EULA) and please review it carefully.
3. **Choose installation folder.** If you agree with the EULA and proceed, you will be prompted for the destination of installation. By default, the installer installs Resonance into Nuke's central plug-in location ([/Library/Application Support/Nuke/7.0/plugins](#)) for Nuke 7.0 or ([/Library/Application Support/Nuke/8.0/plugins](#)) for Nuke 8.0 on Mac OSX or you may choose your own custom location as shown in fig. 2b.

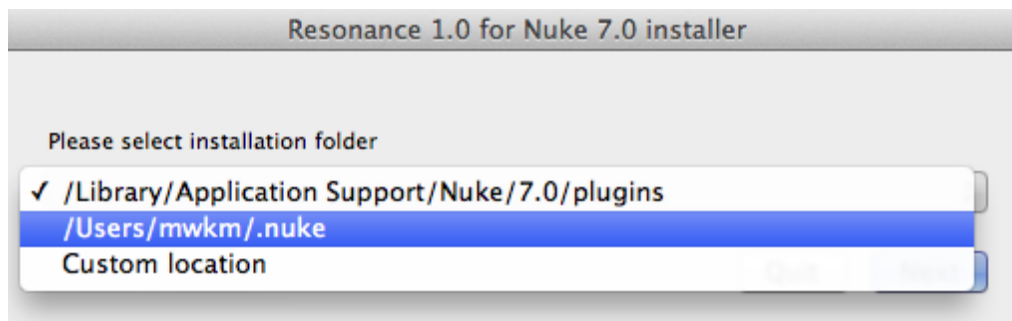


fig. 2b - Resonance 1.0 Installer

4. **NUKE_PATH environment variable.** Once the installer has finished installing the plug-ins, if you are on OSX 10.6 and 10.7, the installer will automatically update your user session's NUKE_PATH environment variable by creating the entry in [\\$HOME/.MacOSX/environment.plist](#) if you have chosen non-default installation location (see Table 2A). For users on OSX 10.8 or later, you have to declare the NUKE_PATH environment variable manually.

Installation folder	To include into NUKE_PATH
<code>\${HOME}/.nuke</code>	<code>\${HOME}/.nuke/artixel's/resonance1.0</code>
Custom Path	<code>\${CUSTOM_PATH}/artixel's/resonance1.0</code>

Table 2A - path to include into NUKE_PATH environment variable (Mac OSX)

5. **Installation Complete.** Resonance plug-ins are now installed and you may want to read the Licensing section to learn how to install your Resonance software license key.

2.4 Silent installation (Mac OSX)

1. **Make sure you have the necessary administrative right for installation.**
2. **Drag-and-Drop.** There is no dedicated installer for Silent installation on Mac OSX, you may simply drag-and-drop the artixels folder into the desired destination folder directly in Finder or use Terminal to copy the artixels folder to your destination folder.
3. **NUKE_PATH environment variable.** In case you have chosen to copy the artixels folder into non-default Nuke plug-in folder, you **MUST** include the corresponding path to your NUKE_PATH environment variable as shown in Table 2A. If not, Nuke will fail to find Resonance plug-in.
4. **Installation complete.** Resonance plug-in is now installed and you may want to read the Licensing section for license installation.

2.5 Using Node-locked License (Mac OSX)

This section describes how to install node-locked license.

1. Make sure you have the necessary administrative right for license installation.

2. Obtain the Host ID. In order to obtain a Resonance node-locked license key, we need information about your host Mac OSX workstation. The command-line utility named `lmxendutil` is included in the installation package and please invoke the following command from a Terminal window to generate a `hostid.txt` file.

```
$ ./lmxendutil -hostid > hostid.txt
```

3. Obtain the license file from us. Please email the `hostid.txt` file to: rsn@artixels.com and you may expect to receive a zipped license file (`rsn_< client_name >.zip`) from us within 2 working days. When you have received the zipped license file, please unzip it and you will find the license key file named `rsn_v1.lic`

4. Install the license key file. Copy the license file (`rsn_v1.lic`) and put it into the appropriate path as shown in the following table (Table 2B).

Installation mode	License Key Location
1 (Nuke 7.0)	<code>/Library/Application Support/Nuke/7.0/plugins/artixels/resonance1.0</code>
1 (Nuke 8.0)	<code>/Library/Application Support/Nuke/8.0/plugins/artixels/resonance1.0</code>
2	<code>\${HOME}/.nuke/artixels/resonance1.0</code>
3	<code>\${CUSTOM_PATH}/artixels/resonance1.0</code>

Table 2B - Node-locked license key location (Mac OSX)

5. Alternate License Location (Optional). In case you would like to keep your license file (`rsn_v1.lic`) in a custom location instead of those listed in Table 2B, you may use an environment variable `ARTIXELS_LICENSE_PATH` to instruct Resonance to locate the license. **Please be reminded that you have to log out and re-login in order to make this environment variable active.**

If you are running Nuke under Mac OSX 10.6 or 10.7, you may use the following line to create this environment variable:

```
$ /usr/bin/defaults write ${HOME}/.MacOSX/environment ARTIXELS_LICENSE_PATH  
/YOUR_PATH/rsn_v1.lic
```

For users of Mac OSX 10.8 or later, environment variables declared in `${HOME}/.MacOSX/environment.plist` will be ignored and they should be declared in `/etc/launch-user.conf` instead. (The approach of including environment variables using `LSEnvironment` key in Nuke's `Info.plist` will not work for Nuke).

6. Resonance is ready now. Have fun !

3 Resonance Overview

3.1 What is Resonance ?

Resonance is a high performance image generator plug-in designed for motion graphics and abstract effects purposes. Based on a simple caustics rendering engine and four user-directed emitters which generate various wave patterns, Resonance allows designers to create sophisticated organic rippling visuals (see fig. 3a) via multiple carefully designed in-viewer controls that we call HUDs (see fig. 3b), i.e. Head-up displays. Users of our Escher plug-in package should find Resonance easy to use as it shares the same design direction with our Escher's caustix plug-in but the results generated by Resonance are far more sophisticated. As there is no inter-frame dependency of Resonance rendering, users are always free to scrub through the timeline for maximum interactive creative design freedom.



fig. 3a - Sample image created by Resonance based on a standard look preset

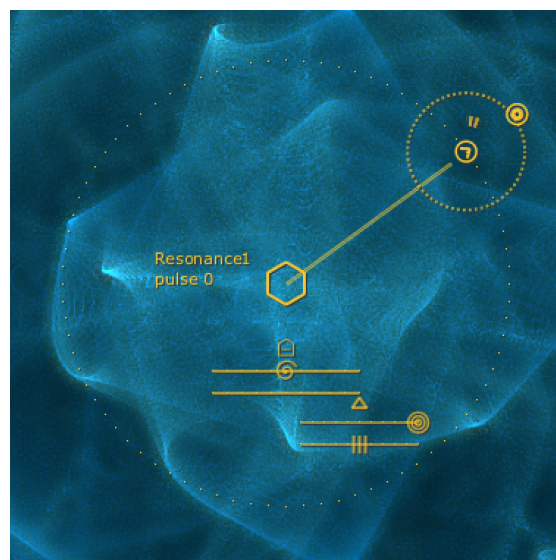


fig. 3b - Resonance HUD (in-viewer control) allows intuitive control of all pattern parameters

User-directed emitters can generate three types of wave patterns, they are radial, planar and spiral (see figures 3c, 3d and 3e). These wave patterns can be mixed together within each emitter (see fig. 3f) and multiple emitters further interfere each other (see fig. 3g).

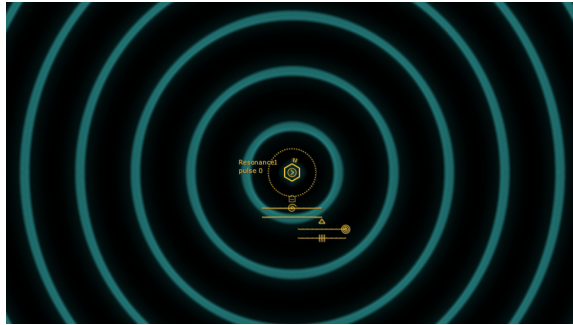


figure 3c - radial pattern

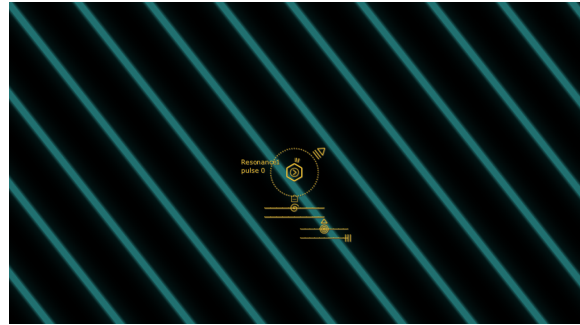


figure 3d - planar pattern

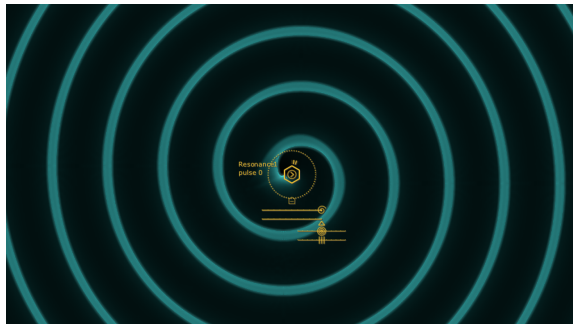


figure 3e - spiral pattern

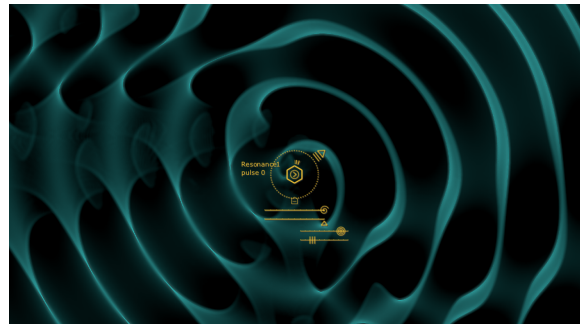


figure 3f - hybrid pattern

All emitters have their own individual noise generator (see fig. 3g) and time base control which allow further spatial and temporal variation of patterns. Considered both the refractive index of medium, depth of projection plane and timestep parameters are all key-frameable, Resonance is ready to create your next unseen visuals.

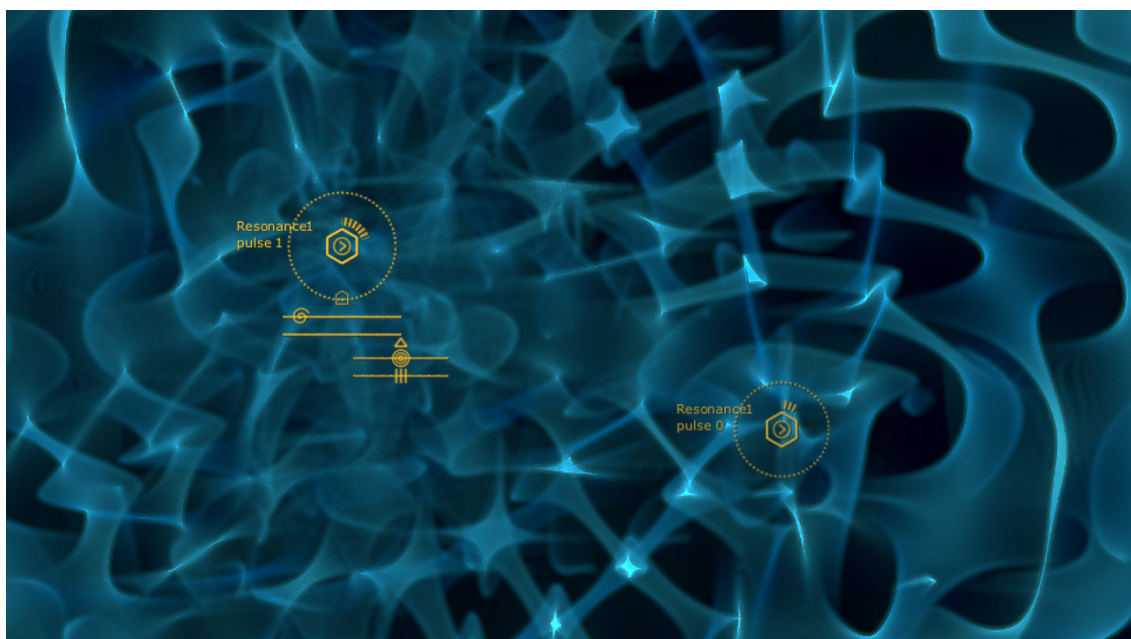


figure 3g - using multiple emitters

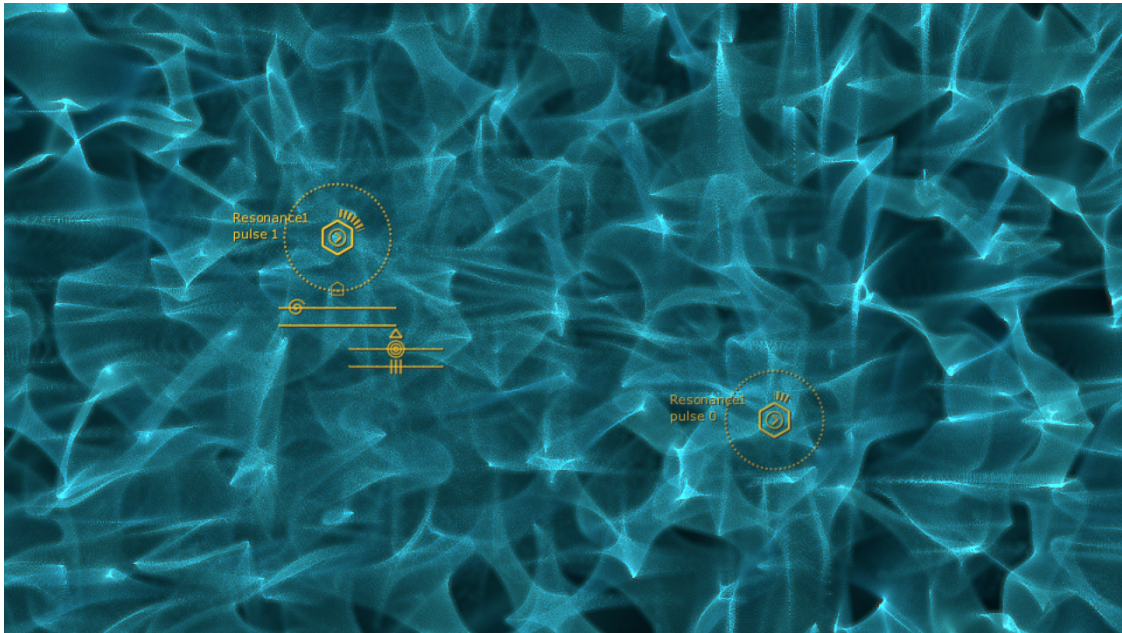


figure 3i - noise applied pattern

3.2 Control Panel

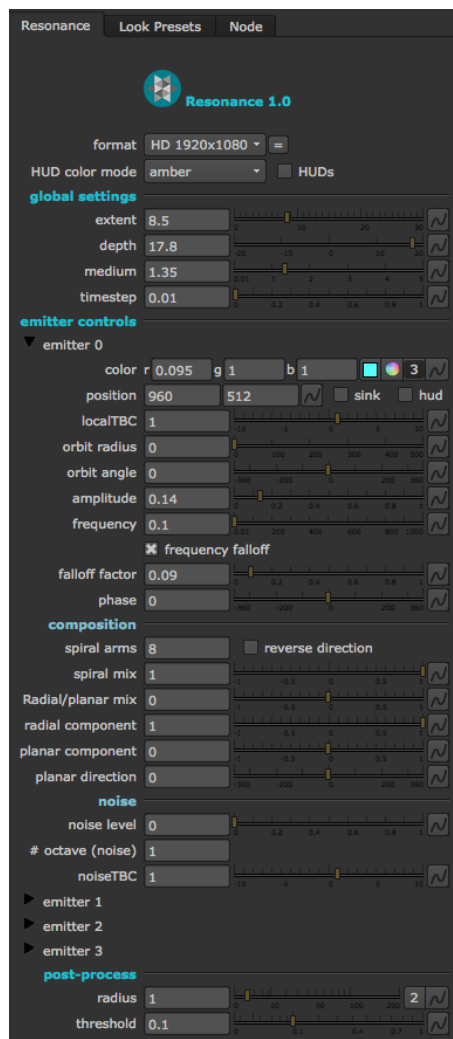


figure 3j - Resonance's control panel

Resonance for Nuke's control panel is divided into 4 sections (see fig. 3j). The upper part allows user to define the image output format and the display color of HUDs (in-viewer controls). There is a convenience checkbox which allows to turn on or off display of all HUDs.

global settings - these parameters affect the overall look of the output. **Extent** defines the coverage of the canvas in terms of number of wave cycles. **Depth** defines the distance between the projection plane and the rippling surface. **Medium** defines the refractive index of the medium and **timestep** serves as the global time-step which defines how fast the wave travels between frames.

emitter controls - each emitter has the same set of attributes, they basically control the color, position, amplitude and frequency of pattern, noise and time base controls.

post process - as only one single ray is sent through each pixel, the rendering output could look fairly noisy or sometimes it actually looks pretty cool though, Resonance's has an advanced edge-preserving post-processor to smooth out its output.

4 Resonance HUDs and look presets

To start using Resonance, you simply create a Resonance node and connect it to the viewer, you should see output similar to the one shown in figure 4a. You might want to play with the HUD controls to start exploring and figure 4b shows the basic controls of Resonance.

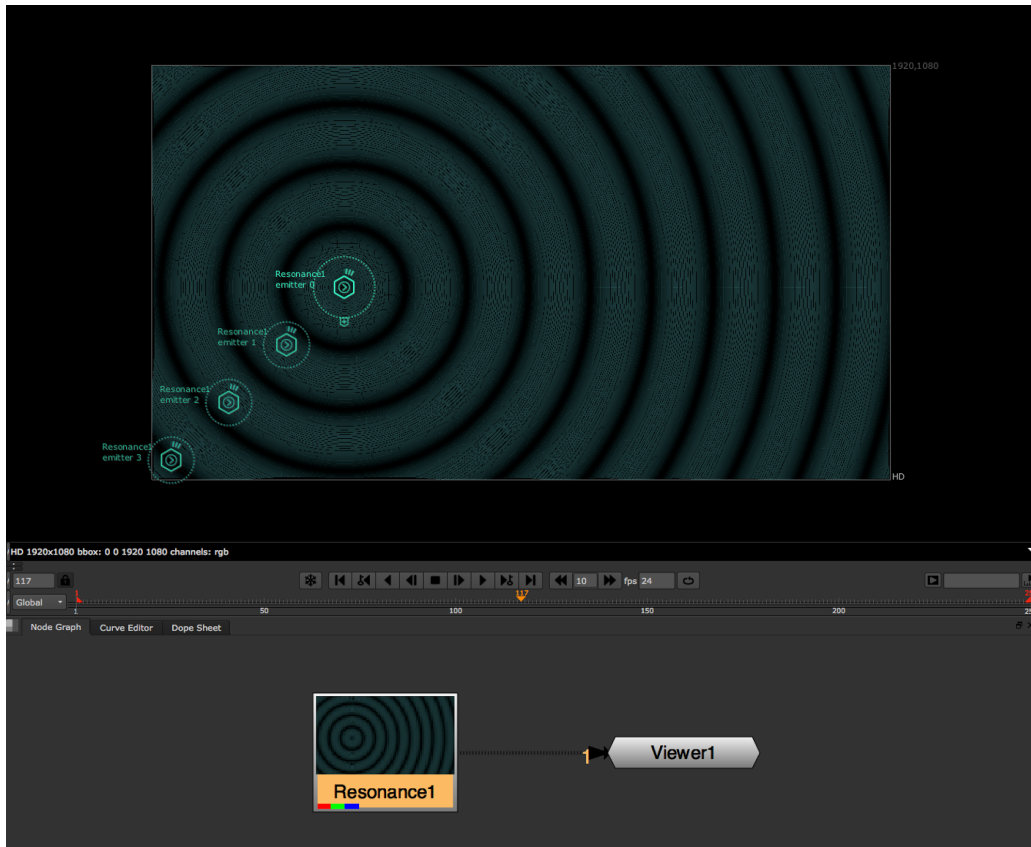


figure 4a - Resonance's default output

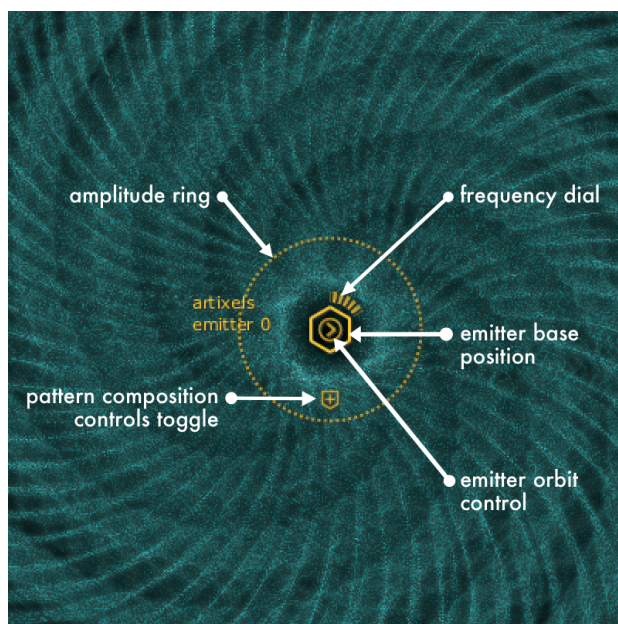


figure 4b - basic controls

amplitude ring - drag it to increase or decrease the amplitude of its wave.

frequency dial - drag it to increase or decrease the frequency of its wave.

emitter base position (hexagonal) - drag it to reposition the base position of the emitter.

pattern composition toggle - toggle display of composition controls.

emitter orbit control - pull to move the emitter off from its base position.

4.1 Resonance HUD

Resonance HUDs are designed carefully to allow designers to stay focused within the viewer without going back and forth to the control panel, it's possible to control the most commonly used parameters of each emitter with the HUDs. By default, each HUD exposes only the basic controls as shown in figure 4b, additional controls are available on demand or if necessary.

4.1.1 Orbit radius and angle controls

By moving the '**orbit radius control**' control (the one with an arrow sign) off from its **base position (displayed as a hexagon)**, an additional HUD named '**orbit angle control**' will become available (see fig. 4c). This orbit feature allows the emitter to move around its base position for creating sophisticated animated movement of the emitter, for example, to create a spiral movement is straight-forward.

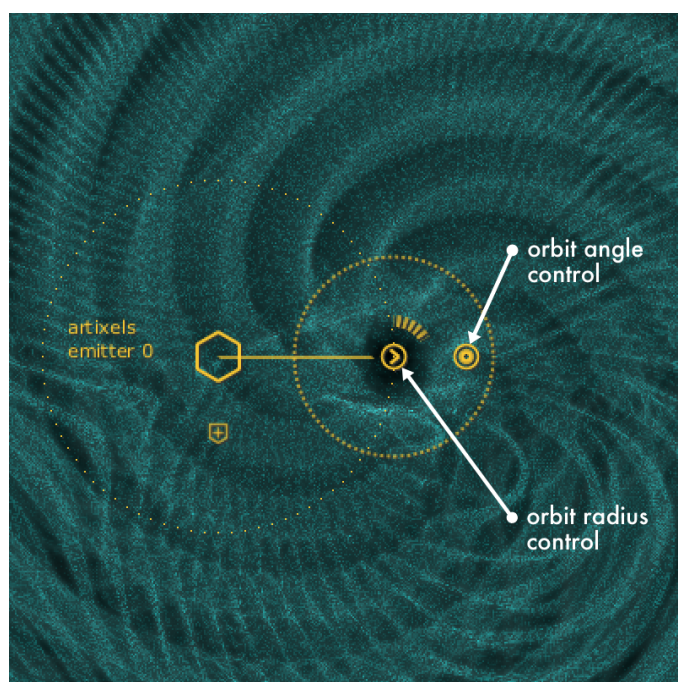


figure 4c - pattern composition controls

orbit radius control - this control defines the radius of the orbit and since this control is solely for controlling the radius parameter, you may notice that it moves back and forth in one fixed direction.

orbit angle control - this control defines the angle of the emitter to its base position (hexagon), when user clicks on this control, a dotted ring will appear.

4.1.2 Pattern composition controls

Another control named '**pattern composition toggle**' (in-viewer control with a plus sign) as shown in figure 8 serves to expose further wave pattern composition controls (see fig. 4d). Resonance emitter can generate two types of wave patterns, they are spiral and radial-planar, their respective contribution is controlled by the upper two sliders. In addition, radial-planar wave is basically a mix of radial and directional planar patterns, weights of each component can be adjusted individually via the corresponding slider control.

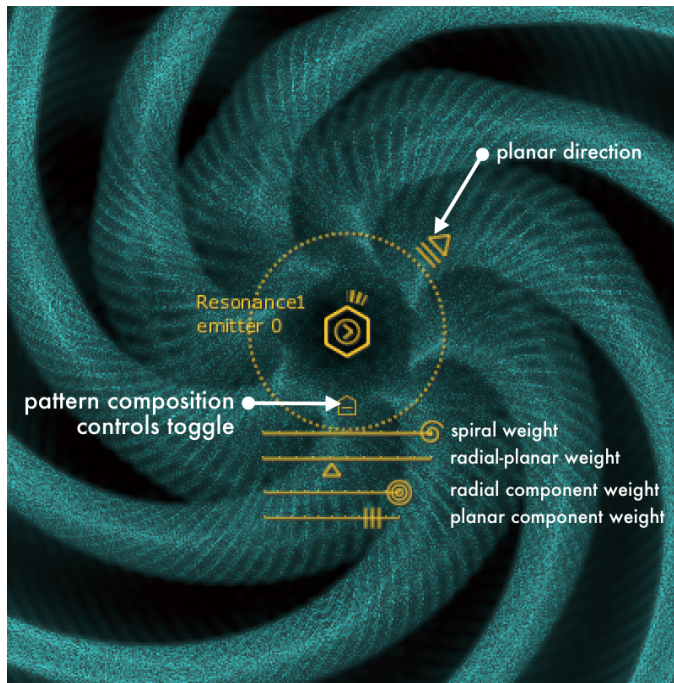


figure 4d - pattern composition controls

pattern composition toggle - toggle display of composition controls.

planar direction - a slider to control the direction of planar wave.

spiral weight - a slider to control the weight or contribution of spiral pattern component.

radial-planar weight - a slider to control the contribution of radial-planar pattern component.

radial component weight - a slider to control the contribution of radial pattern component.

planar component weight - a slider to control the contribution of planar pattern component.

4.2 Look presets

We have carefully designed 10 look presets and included them into the control panel which help designers understand Resonance image making quickly or to be used as a look template (see fig. 4e, 4f and 4g). Each preset defines the depth and medium for a particular look and the necessary parameter set for the emitter, preset can be applied to selected emitter quickly (p1, p2, p3 and p4 buttons).

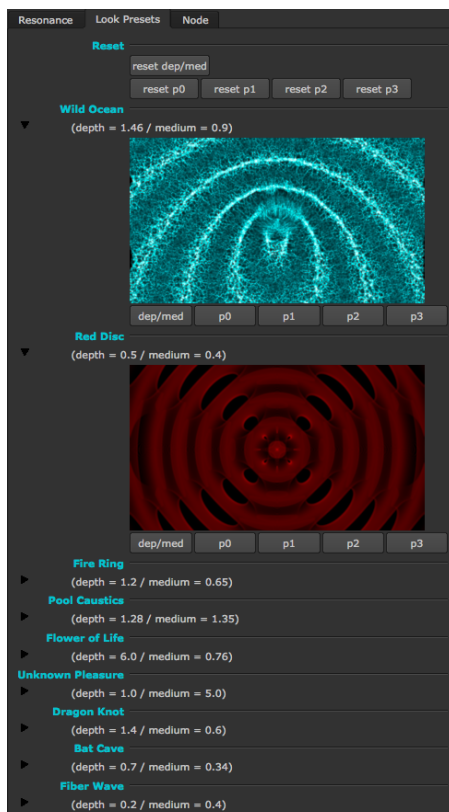


figure 4e - look presets

reset dep/med - reset the depth and medium values of global setting back to default values.

reset p0, p1, p2 or p3 - reset parameters of the selected emitter back to default values.

Common look buttons

dep/med - apply the depth and medium values of the look to global setting.

p0, p1, p2 or p3 - apply the look's emitter parameters to the selected emitter.

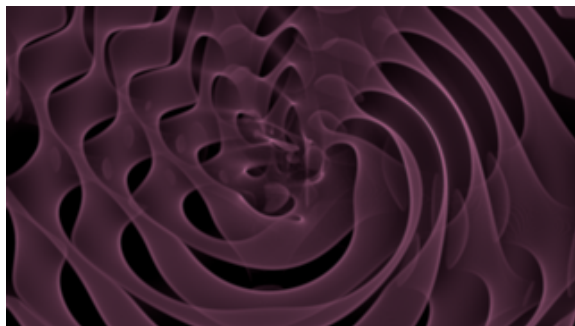


figure 4f - Resonance look preset

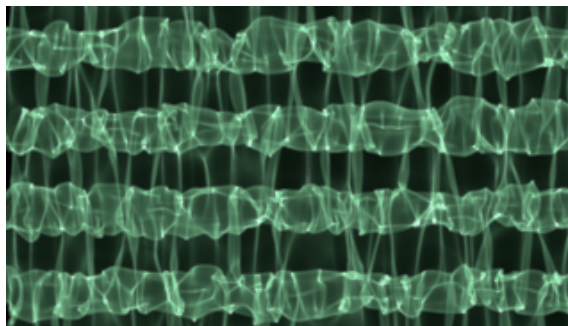


figure 4g - Resonance look preset

5 Resonance parameters reference

The following table details the function of each parameter exposed via the control panel of our Resonance node. The “via HUD” column shows the parameters which are editable via Resonance HUD.

Parameters	Description	via HUD
format	Image size and pixel aspect ratio of the output image	---
HUD color mode	HUD (in-viewer controls) display color	---
HUDs checkbox	global HUD on/off, (i.e. All HUDs will be displayed if checked)	---
GLOBAL SETTINGS		
extent	coverage that the current canvas covers measured in number of wave cycles.	---
depth	distance between the rippling surface and the image projection plane	---
medium	refractive index value of the medium	---
timestep	time increment between each frame, (i.e. a bigger value creates more rapid movement)	---
EMITTER CONTROLS		
color	color contribution of the emitter	---
position	base position of the emitter	YES
sink checkbox	check to turn the emitter into a sink of wave pattern (i.e. wave moving inward into the emitter)	---
hud checkbox	check to display the HUD (in-viewer control) of the emitter	---
localTBC	a local timestep scale factor which allows the emitter's wave to move at its own customized speed	---
orbit radius	distance between the emitter and its base position	YES
orbit angle	angle between the emitter and its base position	YES

amplitude	amplitude of the wave emitted	YES
frequency	frequency of the wave emitted	YES
frequency falloff checkbox	check to turn on the frequency fall-off	---
falloff factor	amount of frequency falloff	---
phase	amount of phase shift	---
COMPOSITION		
spiral arms	number of spiral arms for spiral component	---
spiral mix	weight of spiral wave pattern component	YES
Radial/planar mix	weight of radial/planar wave pattern component	YES
radial component	weight of radial sub-component	YES
planar component	weight of planar sub-component	YES
planar direction	planar direction	YES
NOISE		
noise level	strength of noise component of the emitter	---
# octave (noise)	number of octaves to produce the noise signal	---
noiseTBC	noise component local timestep scale factor which allows noise component to advance at its own customized speed	---

READ THE TERMS AND CONDITIONS OF THIS AGREEMENT CAREFULLY BEFORE INSTALLATION OF THIS SOFTWARE PRODUCT. THIS SOFTWARE PRODUCT AND ITS ACCOMPANYING USER DOCUMENTATION ARE LICENSED (NOT SOLD), AND ARE PROTECTED BY INTERNATIONAL COPYRIGHT LAW. THIS SOFTWARE IS MADE AVAILABLE DIRECTLY BY ARTIXELS TO REGISTERED USERS, IF YOU ARE NOT A REGISTERED USER OR IF YOU HAVE RECEIVED THIS SOFTWARE NOT DIRECTLY FROM ARTIXELS, YOU MUST NOT INSTALL THIS SOFTWARE AND CLICK "Cancel" TO TERMINATE THE INSTALLATION IMMEDIATELY. BY CLICKING "I Agree" BUTTON BELOW ON THIS INSTALLER'S SCREEN YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS LICENSE. IF YOU DO NOT UNDERSTAND OR YOU DO NOT AGREE TO THE TERMS OF THIS LICENSE PLEASE CLICK "Cancel" TO TERMINATE THE INSTALLATION.

This Agreement is made by and between ARTIXELS and the registered end user ("Licensee"). Licensee agrees to pay for the license fee and ARTIXELS agrees to provide the software and its accompanying documentation identified as Resonance for Nuke ("Software"). ARTIXELS and Licensee hereto agree as follows:

1. **License Grant and Obligations.** Subject to the terms of this Agreement, ARTIXELS grants Licensee a revocable, non-exclusive, non-transferrable license to use the Software on a single computer (identified by the host information provided by the Licensee to ARTIXELS) located at Licensee's site in the case of node-locked License. In the case of a Network License, Licensee shall install license server software provided by ARTIXELS on a computer located at Licensee's site and a fixed number (determined by the number of license seats purchased from ARTIXELS) of users may use the Software within a two-kilometer radius from the location of the license server.
2. **Restrictions.** Licensee shall not modify, translate, disassemble, decompile, reverse engineer or create derivative works based on the Software or any copy, in whole or in part. Licensee shall not redistribute, sell, rent, lease, sublicense, or otherwise transfer or disclose the Software to third parties.
3. **Ownership and Proprietary Rights.** The Software is copyrighted by ARTIXELS and is proprietary to ARTIXELS, which retains ownership of the Software. Licensee agrees to hold the Software in confidence and to take reasonable steps to prevent unauthorized copying or disclosure.
4. **Disclaimer of Warranty.** Licensee expressly acknowledges that the Software may contain software bugs and other problems that could cause interruptions. Licensee agrees that use of the Software is at Licensee's sole risk and the Software is provided "AS IS" and without warranty of any kind. ARTIXELS EXPRESSLY DISCLAIMS ALL WARRANTIES AND/OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. ARTIXELS DOES NOT WARRANT THE USE OF OR THE RESULTS OF THE USE THAT MAY BE OBTAINED WITH THE SOFTWARE OR RELATED DOCUMENTATION IN TERMS OF THEIR CORRECTNESS, ACCURACY, RELIABILITY, OR OTHERWISE.
5. **Limit of Liabilities.** IN NO EVENT SHALL ARTIXELS, COPYRIGHT HOLDERS OF THE SOFTWARE OR ANYONE ELSE INVOLVED IN THE CREATION, DEVELOPMENT, PRODUCTION AND LICENSING OF THE SOFTWARE BE LIABLE FOR ANY CONSEQUENTIAL, UNEXPECTED, INCIDENTAL, OR INDIRECT DAMAGES, EVEN IF THEY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.
6. **Termination.** Licensee may terminate this Agreement at any time by destroying the Software and all copies. ARTIXELS has the right to terminate this Agreement and the license it grants immediately if Licensee fails to comply with any term or condition of this Agreement. Licensee agrees that upon any such termination by ARTIXELS, Licensee shall destroy the Software and all copies.
7. **General Provisions.** 7.1 In the event one or more provisions of this Agreement be held invalid or illegal, ARTIXELS and Licensee agree that the other provisions of this Agreement shall remain valid and not be affected. 7.2 The Agreement may be modified only by writing signed by ARTIXELS and Licensee.